

*SOLIDAGO DURANGENSIS* (ASTERACEAE: ASTEREA) A  
NEW SPECIES FROM MÉXICO

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ABSTRACT

*Solidago durangensis* *sp. nov.* is known by only a few collections from the vicinity of the city of Durango, and it may now be extinct. The closest relative of the new species is hypothesized to be *S. paniculata* DC.

KEY WORDS: *Solidago*, Astereae, Asteraceae, México

*Solidago durangensis* Nesom, *sp. nov.* TYPE: MÉXICO. Durango (Edo.): city of Durango and vicinity, Apr-Nov 1896, *E. Palmer 363* (HOLOTYPE: US!; Isotype: US!).

*Solidagini paniculatae* DC. similis statura elata et capitulescentia paniculati-corymboidea ampla sed vestimento valde evoluto hispidulo, phyllariis brevioribus, et acheniis pubescentibus differt.

Herbs, probably perennial (base not seen), evenly hispidulous on the stems and leaves with white, erect or slightly crisped hairs less than 0.1 mm long, the stems apparently 1 m or more tall, yellowish green to slightly purplish. Leaves narrowly oblanceolate to elliptic-lanceolate, 1 or 3 nerved, 6-10 cm long at midstem, strongly reduced in size in the capitulescence, 6-9 mm wide, the margins slightly revolute, entire or the lower leaves with a few, minute teeth, axillary fascicles not produced. Heads secund in dense corymboid panicles, on bracteate pedicels; phyllaries in 3-4 subequal series, very thin, with a narrow orange midvein, the inner 3.0-3.5 mm long, triangular-lanceolate, the outer minutely fringed-ciliate, otherwise glabrous. Ray flowers 12-18, 2.5 mm long, the ligule ca. 1.5 mm long. Disc flowers 9-14, 3.5-3.8 mm long, the lobes 1.2-1.3 mm long. Achenes sparsely strigose with very thin hairs, 1.4-1.6 mm long, obtriangular-fusiform, with 6 orange resinous nerves; pappus of numerous barbellate bristles.

Additional collection examined: MÉXICO. Durango: city of Durango and vicinity, Apr-Nov 1896, *E. Palmer 217* (F, MO).

Although these plants are known only from a few relatively old collections, their morphology is extremely distinctive. Among the Mexican species of *Solidago*, the tall stature, relatively long leaves, large, paniculate-corymboid capitulescences, and the large number of ray flowers of *S. durangensis* Nesom are most similar to those of *S. paniculata* DC. In contrast, the newly described species differs from *S. paniculata* in its evenly and strongly developed, hispidulous (vs. glabrous) vestiture, much shorter (vs. 5-6 mm long) phyllaries, and pubescent (vs. glabrous) achenes. *Solidago paniculata* is closely related to other species occurring in México, *S. sempervirens* L., *S. stricta* Ait., and *S. confinis* A. Gray, all of which are glabrous and characteristically occur in wet habitats.

Although the habitat of *Solidago durangensis* is not known, it is likely that the collections were made from the wet, saline prairies on the east and northeast side of the city (1900-1950 m in elevation), where other narrowly endemic species of vascular plants are known to occur. Since recent collectors of Compositae from this area of Durango apparently have not encountered additional plants of this singular species, the original population may now be extinct, and a careful search for it needs to be made.

In the first phases of my study of Mexican *Solidago*, I annotated some specimens of *S. durangensis* as *S. missouriensis* Nutt., and although they have similarities at least in habit, the Mexican representatives of the latter differ from *S. durangensis* in their shorter stature, axillary fascicles of leaves, nearly glabrous stems and leaves, shallowly serrate blades, and smaller number of disc flowers. *Solidago missouriensis* in México is known only from central Coahuila.

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